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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/031,593 | 01/23/2002 | Cha-Gyun Jeong | K5675.0005/P005 | 6285 |
| 7590 06/03/2005 | | | EXAMINER | |
| Gabrielle S Roth Dickstein Shapiro Morin & Oshinsky 2101 L Street NW Washington, DC 20037-1526 | | | REKSTAD, ERICK J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2613 | |

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/031,593 | Applicant(s) JEONG, CHA-GYUN | |
| | Examiner Erick Rekstad | Art Unit 2613 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a first action for application no. 10/031,593 filed on January 1, 2002 in which claims 1-9 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,219,030 to Nonomura et al. in view of US Patent 5,625,410 to Washino et al.
[claims 1, 2 and 4]

Nonomura teaches the method to compress and process a video signal comprising:

(a) a step to scale (scaling unit (802) of Figure 8) the resolution of the digital video signal outputted from analog/digital converter (NTSC Decoder (702) of Figure 7) depending on the even/odd fields of the inputted video signals (Col 9 Lines 12-18); and

(b) a step to compress or process for multi-screens (data transfer control unit (804) of Figure 8) the scaled digital video signals according to the resolution scaled in the said step (a) (Col 11 Lines 62-10, Col 13 Line 53-Col 14 Line 17). Nonomura does not teach the use of multi-screen digital video signals.

Further, as required by claims 2 and 4, Nonomura teaches the scaling of the even frames for storage and scaling of odd frames for display (Col 11 Lines 62-10, Col 13 Line 53-Col 14 Line 17).

Washino teaches a similar PC based video monitoring system with the addition of multiple video sources (Abstract). Each camera is provided a single A/D converter (100 of Figure 9, Col 7 Lines 55-60). Washino teaches several different scaling sizes for displaying multiple video signals on a display (Col 5 Line 1-Col 6 Line 6, Figs 1-6). Washino further teaches the object of the invention is to provide a more efficient method for monitoring camera outputs by means of multiple-window display system implemented on a computer platform (Col 3 Lines 53-63). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the single video signal processing method of Nonomura with the multiple video signal monitoring method of Washino in order to provide a more efficient method for monitoring multiple camera outputs as taught by Washino.

[claim 5]

Washino further teaches the multi-screen process is the process for 4 screens, 9 screens and 25 screens as shown in Figures 1, 2 and 4. Though Washino does not teach the use of 16 screens it would have been obvious to one of ordinary skill in the art at the time of the invention that a 4x4 display is an obvious variation of a 2x2, 3x3 and 5x5 display (Official Notice).

[claim 7]

As shown in Figure 5, Nonomura teaches the system for processing a video signal in which the even frames are scaled and stored in the external memory (505) and the odd fields are scaled and displayed on the display (302). The system contains an analog/digital converter (702, Fig. 7) contained in the image input board (504) (Col 8 Lines 52-57). The system further contains a compression storage (502) which stores the even fields before storage in the external storage (505) (Col 13 Lines 64-67). The system further contains a cpu (501) which initializes the system and further controls the processing of the video (Col 7 Lines 55-67, Col 12 Lines 14-23). The system further contains a graphic display board (503) used to display the odd fields (Col 8 Lines 32-44). Nonomura does not teach a buffer for the odd fields before being sent to the video processor. Nonomura further does not teach the use of multiple video streams.

Washino teaches in Figure 7 the input of multiple video streams for use in a PC based system for monitoring and storing video for security or other monitoring applications (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the single video signal processing system of Nonomura with the multiple video signal monitoring system of Washino in order to provide a more efficient method for monitoring multiple camera outputs as taught by Washino. Washino does not teach the use of a buffer for the odd fields before being sent to the graphics card.

As both Nonomura and Washino teach the use of a PC based monitoring system and Nonomura teaches the use of a buffer for the even fields before storing in an external storage, it would have been obvious to one of ordinary skill in the art at the time

of the invention to use a buffer to store the odd fields until needed by the graphics processing device (OFFICIAL NOTICE).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura and Washino as applied to claim 1 above, and further in view of US Patent 5,881,205 to Andrew et al.

Nonomura and Washino teach the method of claim 1. Nonomura and Washino do not teach the use of 352x240 resolution. Andrew teaches the resolution 352x240 is one of the fixed picture size specified by the White Book standard (Col 3 Lines 61-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to use to the 352x240 resolution with the method of Nonomura and Washino in order to provide a video in compliance with the White Book standard as taught by Andrew.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura and Washino as applied to claim 1 above, and further in view of US Patent 5,648,792 to Sato et al.

Nonomura and Washino teach the method of claim 1. Washino further teaches the division of a display for use by multiple viewing windows (Col 3 Lines 1-28, Figs. 1-6). Nonomura and Washino do not teach the use of a 720x480 display. Sato teaches the use of an LCD display with the resolution of 720x480 (Col 6 Lines 33-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Nonomura and Washino in order to provide 4 screens, 9 screens or any number of screens for an LCD display (Official Notice).

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nonomura and Washino as applied to claim 7 above, and further in view of US Patent 5,881,205 to Andrew et al. and US Patent 5,648,792 to Sato et al.

Nonomura and Washino teach the system of claim 7. Andrew teaches the resolution 352x240 is one of the fixed picture size specified by the White Book standard (Col 3 Lines 61-67). Nonomura and Washino do not teach the use of 352x240 resolution. It would have been obvious to one of ordinary skill in the art at the time of the invention to use to the 352x240 resolution with the method of Nonomura and Washino in order to provide a video in compliance with the White Book standard as taught by Andrew.

Washino further teaches the division of a display for use by multiple viewing windows (Col 3 Lines 1-28, Figs. 1-6). Nonomura and Washino do not teach the use of a 720x480 display. Sato teaches the use of an LCD display with the resolution of 720x480 (Col 6 Lines 33-39). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Nonomura and Washino in order to provide 4 screens, 9 screens or any number of screens for an LCD display (Official Notice).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent 6,069,662 to Horiuchi et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 571-272-7338. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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